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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,784	06/30/2006	Erik Alexander Bijpost	2006_0395A	2571

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EXAMINER

HOLLOMAN, NANNETTE

ART UNIT	PAPER NUMBER
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1612

NOTIFICATION DATE	DELIVERY MODE
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01/20/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ddalecki@wenderoth.com
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Office Action Summary

Application No.

10/574,784

Applicant(s)

BIJPOST ET AL.

Examiner

NANNETTE HOLLOMAN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Applicants' arguments, filed October 29, 2010 have been fully considered. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

Priority

Claim for foreign priority was inadvertently acknowledged on form PTOL-326 and BIB Data Sheet filed on July 22, 2010, however, foreign priority is not claimed and copies of certified priority documents have not been received in the National Stage application from the International Bureau.

Claim Rejections - 35 USC § 102

Claims 1-8 and 10-14 were rejected under 35 U.S.C. 102(b) as being anticipated by Nabiev et al. (SU 80661, English translation). This rejection is maintained.

Applicant's Arguments

Applicant argues the amount of added ammonium complexes is from 5 to 30 wt. % based on the weight of the fertilizer and does not refer to the added amount of acid. Applicant further argues the methods disclosed in the document results in a coating of ammonium complexes on the fertilizer granules; wherein the present invention teaches causing a re-crystallization of the surface of urea granules by a reaction with a dilute solution of a specific class of carboxylic acids in order to obtain improved caking tendencies and mechanical strength of the granules. Applicant's arguments have been fully considered but they are not persuasive.

Examiner's Response

It appears Nabiev et al. teaches substantially the same composition, formed in substantially the same manner for substantially the same purpose. Nabiev et al. teaches 0.7 g succinic acid is sprayed onto 100 g granular urea while stirring and then drying; wherein the succinic acid concentration is 30% (p. 2, lines 22 and 23 and p. 3 line 4); thereby meeting the limitations of instant claims 7 and 8. Therefore the acidic composition of Nabiev et al should also cause re-crystallization to the surface of urea similar to the solution of the instant claims. Therefore, the burden is shifted to the Applicant to provide evidence that the composition of the cited art does not possess the feature being relied on for patentability, i.e. forming a re-crystallization of the urea granule surface. Furthermore, a teaching of re-crystallization of the surface of urea granules by a reaction with a dilute solution of a specific class of carboxylic acids does

not appear to be a limitation of the instant claims. Therefore, the reference encompasses the claimed limitations.

Claim Rejections - 35 USC § 103

(Previous Rejection)

Claims 1-5 and 8-14 were rejected under 35 U.S.C. 103(a) as being unpatentable over Snartland et al. (WO 99/15480). This rejection is maintained and further applied to new claim 15.

Applicant's Arguments

Applicant argues the present invention teaches forming a re-crystallization of the urea granule surface and there is no deposition/formation of a shell etc. on the granules, while Snartland et al. teach forming a mineral shell on the granules. Thus, it is evident that the present invention is distinct from the reference, in that a different function is employed to solve the same problem. Applicant further argues there are no clues in the cited prior art that it is possible to obtain a similar effect as obtained by the reference as that of the instant claims.

Examiner's Response

In regard to a different function, it appears the "function" of the reference is coating a particulated fertilizer with an aqueous solution of acid, to reduce dust

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formation and caking during handling and storage of the fertilizer as previously asserted (Abstract). Therefore, the method of the reference and the method of the instant application appear to obtain the same effect, i.e. reduce dust formation and caking during handling and storage of the fertilizer. When looking to the instant specification to obtain direction in regards to the forming a re-crystallization of urea granule surface, it appears a coating is formed on the urea granules as evidenced by paragraphs [0016] and [0021] and is contrary to Applicant's arguments that no deposition/formation of a shell etc. is on the granules.

In regard to new claim 15, where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. See MPEP 2144.05. Snartland et al. discloses the amount of acid as a "result effective" variable, since the amount used reduces dust formation and caking during handling and storage of the fertilizer (p. 4, lines 23-25). Therefore, it would be obvious to have varied the amount of acid within the composition motivated by the desire to achieve the desired effect, i.e. reduce dust formation and caking during handling and storage of the fertilizer.

Therefore, Snartland et al. encompass the claimed limitations.

(New Rejection)

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nabiev et al. (SU 806661, English translation, previously disclosed) as applied to claims 1-8 and 10-14 above, and further in view of Christoffel et al. (US patent No. 3,392,007).

Nabiev et al. is discussed in the office action filed July 22, 2010 and above and differs from the instant claims insofar as it does not disclose wherein during the addition of the solution the temperature of the urea is 40-70 °C.

Christoffel et al. disclose free flowing fertilizers coated with an aqueous acid solution; wherein the fertilizer, i.e. urea is coated preferably at a temperature of 25-90°C (Abstract, column 3, line 40 and 41 and Example 1). Christoffel et al. disclose using temperatures below 25°C necessitate use of cooling and is disadvantageous and temperatures above 90°C may cause the fertilizer composition to solubilize in the aqueous acid and hence not be coated rather be present in the coating itself (column 3, lines 41-47). Christoffel et al. differs from the instant claims insofar as it does not disclose the acid is a carboxylic acid with the general formula of that disclosed in instant claim 1.

It would have been obvious to one of ordinary skill in the art to have used the claimed temperature range in the method of Nabiev et al. motivated by the desire to use a range that does not necessitate use of cooling, is not disadvantageous; and does not cause solubilization of the fertilizer to be coated, i.e. urea with aqueous acid solutions, as disclosed by Christoffel et al.

The prior art discloses the use of temperatures between 25-90°C. Thus, the prior art differs from the instant claims insofar as it does not disclose the particular endpoints recited therein, i.e. 40-70°C. It is well-settled, however, that even a slight overlap in range establishes a *prima facie* case of obviousness. In re Peterson, 65 USPQ2d 1379, 1382 (Fed. Cir. 2003). Accordingly, it since an overlap plainly exists here, it would have been obvious to have selected values within the overlap, consistent with the reasoning of the Peterson decision.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Snartland et al. (WO 99/15480, previously disclosed) as applied to claims 1-5 and 8-15 above, and further in view of Christoffel et al. (US patent No. 3,392,007).

Snartland et al. is discussed in the office action filed July 22, 2010 and above and differs from the instant claims insofar as it does not disclose wherein during the addition of the solution the temperature of the urea is 40-70 °C.

Christoffel et al. disclose free flowing fertilizers coated with an aqueous acid solution; wherein the fertilizer, i.e. urea is coated preferably at a temperature of 25-90 °C (Abstract, column 3, line 40 and 41 and Example 1). Christoffel et al. disclose using temperatures below 25 °C necessitate use of cooling and is disadvantageous and temperatures above 90 °C may cause the fertilizer composition to solubilize in the aqueous acid and hence not be coated rather be present in the coating itself (column 3, lines 41-47). Christoffel et al. differs from the instant claims insofar as it does not disclose the acid is a carboxylic acid with the general formula of that disclosed in instant claim 1.

It would have been obvious to one of ordinary skill in the art to have used the claimed temperature range in the method of Snartland et al. motivated by the desire to use a range that does not necessitate use of cooling, is not disadvantageous, and does not cause solubilization of the fertilizer to be coated, i.e. urea with aqueous acid solutions, as disclosed by Christoffel et al.

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Conclusion

No claim is allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NANNETTE HOLLOMAN whose telephone number is (571) 270-5231. The examiner can normally be reached on Mon-Fri 800am-500pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frederick Krass can be reached on 571-272-0580. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/N. H./
Examiner, Art Unit 1612

/Frederick Krass/

Supervisory Patent Examiner, Art Unit 1612